

ABSTRACT OF THE DISCLOSURE

An arrayed waveguide grating including at least one first optical waveguide, a first slab waveguide, an arrayed waveguide, a second slab waveguide and a plurality of second optical waveguides. The arrayed waveguide is connected to the first optical waveguide via the first slab waveguide. The arrayed waveguide includes a plurality of channel waveguides each of which has a different length. The plurality of second optical waveguides are connected to the arrayed waveguide via the second slab waveguide. A number of the plurality of channel waveguides is determined such that a crosstalk is at most a predetermined value.

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